

**EASTERN LOUDOUN
AREA MANAGEMENT PLAN**

Adopted
September 2, 1980
REFORMATTED 1994

Amended May 2, 1983, July 16, 1984, February 19, 1985
September 1985, April 7, 1986, March 16, 1987, November 23, 1987, June 20, 1988
October 3, 1988, November 6, 1989, December 17, 1991, January 6, 1993, September 21, 1994
April 19, 1995, June 21, 1995, August 2, 1995, November 6, 1996

**DEPARTMENT OF PLANNING
1 HARRISON STREET, 3rd FLOOR
LEESBURG, VA. 20175**

ABSTRACT

Title: Eastern Loudoun Area Management Plan

Author: The Eastern Loudoun Area Planning Committee
Loudoun County Planning Commission
Loudoun County Department of Planning

Subject: Land use and future development policies, programs and
implementation techniques

Date: September 2, 1980

Amended May 2, 1983, July 16, 1984, February 19, 1985
September 1985, April 7, 1986, March 16, 1987, November 23, 1987
June 20, 1988, October 3, 1988, November 6, 1989

Source of Copies: The Loudoun County Department of Planning
(703) 777-0246
478-8416 (metro)

Also available in public libraries

Number of Pages: 269

Abstract:

This document represents the options and proposals for future land development in eastern Loudoun County. The Plan reviews land use management, commercial, industrial, heritage, transportation, energy, zoning and fiscal considerations. The recommendations and implementation sections within each plan offer the planning alternatives for future action. The Plan is a component of the Loudoun County Comprehensive Plan.

ACKNOWLEDGEMENTS

LOUDOUN COUNTY BOARD OF SUPERVISORS

Carl F. Henrickson, Chairman
James F. Brownell, Vice Chairman**
Andrew R. Bird, III
Thomas S. Dodson

Gerry Gardner
John Milton**
Frank Raflo**
Travis L. Sample

Philip A. Bolen, County Administrator
A.R. Sharp, Jr., Deputy County Administrator

LOUDOUN COUNTY PLANNING COMMISSION

John A. Stowers, Chairman
Marc A. Fine, Vice Chairman
C. Lynn Adams
Ernest M. DeCorte*

C.P. Poland
Joe S. Ritenour*
Eugene T. Ruane*
R. Loel Schaaf

EASTERN LOUDOUN AREA PLANNING COMMITTEE

Charles D. Grant, Chairman	Dulles
Susan Guay McDade, Vice Chairman	Sterling
Giles M. Wilkinson, former Chairman	Guilford
Andrew R. Bird, III***	Sterling
James R. Care	Sterling
Larry J. Dombrowski	Sterling
Robert F. East	Industrial Development
Marc A. Fine	Broad Run
Gerry Gardner	Guilford
Shannon Geddie	Sterling
Carl Henrickson	Broad Run
Richard Linn	Broad Run
Leonard L. Paige	Sterling
C.P. Poland	Dulles
Eugene T. Ruane	Sterling
Betty Sanfelici	Broad Run
Travis L. Sample	Dulles
R. Loel Schaaf	Guilford
Henry C. Stowers	Dulles
Terry Vipond	Broad Run

- * Comprehensive Development Plan Committee of the Planning Commission
Charles D. Grant, member, ex officio
- ** Community Services and Development Committee
- *** Ex officio

STAFF ACKNOWLEDGMENTS

Staff members of the Loudoun County Department of Planning and Zoning with primary responsibility for the preparation of this Area Plan:

John M. Dugan, Director of Planning and Zoning
 William J. Keefe, Chief of Comprehensive Planning - Planner in Charge
 Milton J. Herd, Planner III
 Lewis R. Sanford, Planner II*
 Richard Calderon, Planner II
 Richard Rein, Planner II
 Velma Smith, Planner II*

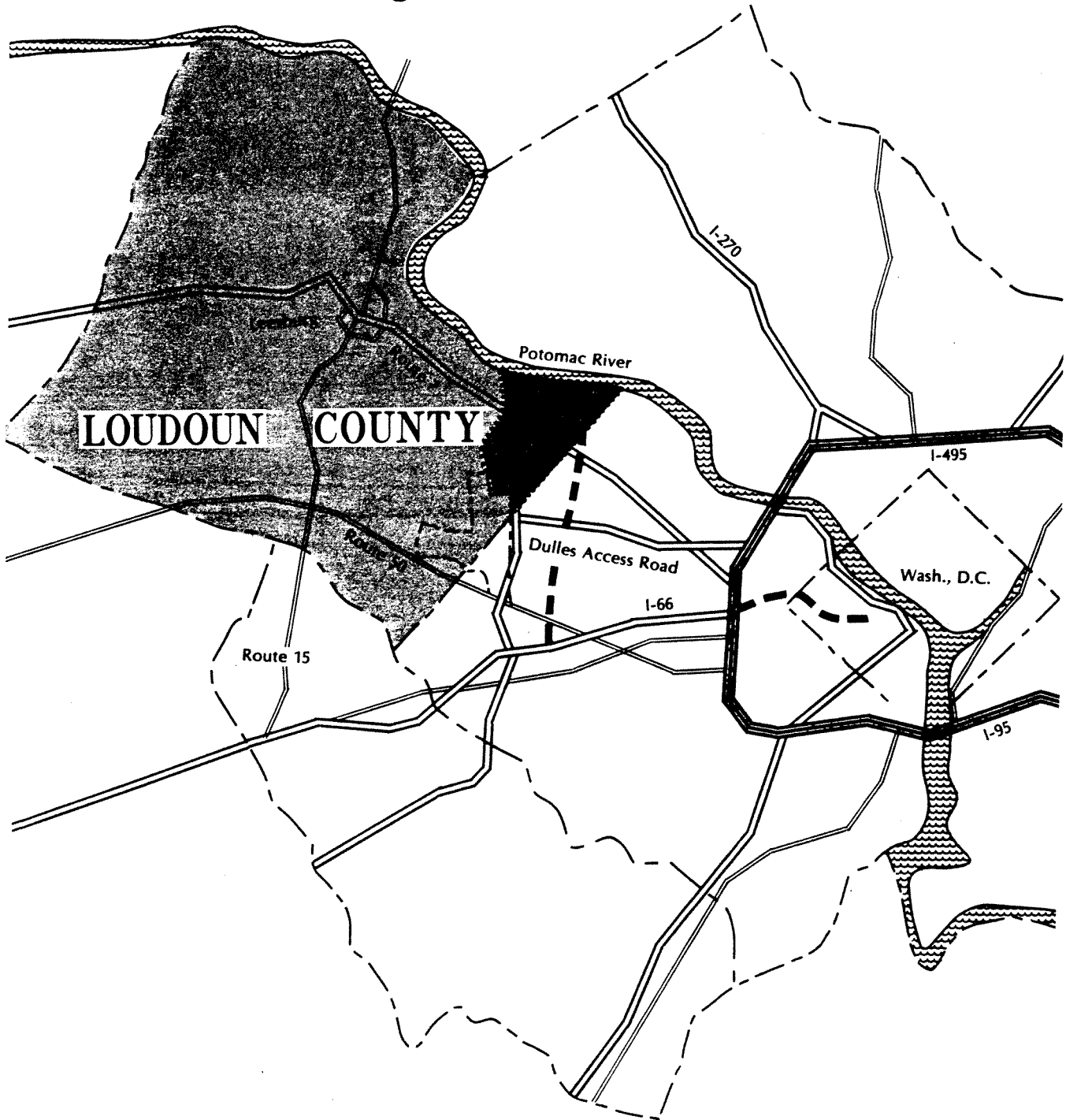
STAFF RESPONSIBILITIES			
<u>Residential</u> Richard Calderon William J. Keefe	<u>Commercial</u> John M. Dugan	<u>Industrial</u> Milton J. Herd	<u>Environmental</u> Velma Smith Richard Rein
<u>Community Design</u> Milton J. Herd	<u>Heritage Conservation</u> Milton J. Herd	<u>Transportation</u> William J. Keefe	<u>Energy</u> Velma Smith William J. Keefe
<u>Fiscal</u> Lewis R. Sanford Richard Calderon	<u>Community Facilities</u> William J. Keefe Lewis R. Sanford	<u>Editing</u> Teckla H. Cox	<u>Typing</u> Teckla H. Cox Geraldine Timberlake Susan Diedrich Faye Surber
<u>Graphic Design</u> Milton J. Herd Richard Calderon	<u>Graphic Artist</u> Janis Robinson Nicholas Pinchot		

SPECIAL STAFF ASSISTANCE

Richard S. Weber	Soil Scientist
Robert Montgomery	Sanitary Supervisor, Department of Environmental Health
William W. Wiggins	Director of Technical Services
Gregory Williams	District Conservationist, Soil Conservation Service
June Bachtell	Director of Economic Development
James Van Zee	Chief of Current Planning, Zoning Administrator

* former staff

Regional Location



Eastern Loudoun Management Plan Study Area

TABLE OF CONTENTS

	<u>PAGE</u>
PLAN SUMMARY	
Introduction	1
PLAN SUMMARY	
Eastern Loudoun Area Management Plan	3
Residential Development	3
Environmental Plan	5
Community Design	7
Commercial and Office Plan	9
Industrial Plan	10
Transportation Plan	11
Community Facilities Plan	12
Fiscal Plan	13
Heritage Conservation	15
Energy Plan	16
LAND USE PLANS	18
Residential Development	20
Environmental Plan	55
Community Design	90
Commercial and Office Development Plan	114
Industrial and Economic Plan	141
Transportation Plan	164
Community Facilities Plan	208
Fiscal Plan	245
Heritage Conservation Plan	256
Energy Plan	277

LIST OF TABLES

	<u>PAGE</u>
 LAND USE PLANS	
TABLE 1: Housing Units by Type, February 1979 - Eastern Loudoun	24
TABLE 2: Household Forecast - Eastern Loudoun Planning Areas	25
TABLE 3: Compatible Land Uses	30
 COMMUNITY DESIGN	
TABLE 1: Existing Open Space Element	98
 COMMERCIAL AND OFFICE	
TABLE 1: Commercial Development in Eastern Loudoun, 1986	116
TABLE 2: Regional Center: New Development	121
TABLE 3: Community Service - New Development	124
 INDUSTRIAL AND ECONOMIC DEVELOPMENT PLAN	
TABLE 1: Estimated Employment in Eastern Loudoun Area 0 1979	156
TABLE 2: Industrial Fires in Eastern Loudoun	157
TABLE 3: Existing Industrial Zoned Land	160
 TRANSPORTATION PLAN	
TABLE 1: Traffic Congestion - Eastern Loudoun	171
TABLE 2: Criteria for Capacity and Level of Service	172
TABLE 3: Proportion of Work Trips and Daily Vehicle Trips in 1995 from Sub-areas A&B travelling to the Core and Tyson's Corner Area . . .	173
TABLE 4: 1995 Estimated Transit and Carpool Potential to Regional Core	174
TABLE 5: 1995 Estimated Transit and Carpool Potential to Tyson's Corner Area	174
TABLE 6: Priority Rating and Highway Improvement Phasing	177
 SCHOOLS	
TABLE 1: Existing School Facilities	219
TABLE 2: Eastern Loudoun Planning Area - Pupil Forecasts	220
TABLE 3: 1979 New School Construction Criteria	222
TABLE 4: Existing Recreational Facilities	230
TABLE 5: Park Criteria	233
TABLE 6: Park Size Criteria	234
TABLE 7: Recreational Facilities Needed	236

LIST OF TABLES

(Concluded)

	<u>PAGE</u>
FISCAL PLAN	
TABLE 1: Countywide Local Tax Breakdown for FY1978-1979	247
TABLE 2: Loudoun County Estimate Household Cost FY 1979-1980	248
TABLE 3: Per Household Capital Costs	249
ENERGY PLAN	
TABLE 1: Primary Household Energy Source - 1970	278

LIST OF FIGURES

PAGE

LAND USE PLANS

Figure 1	Dwelling Units in the "Pipeline"	21
Figure 2	Existing Zoning (Generalized)	26
Figure 3	Community Concept	29
Figure 4	Cluster Design	31
Figure 5	Proposed Land Use	36
Figure 6	Future Road Network in Oak Grove Area	37
Figure 7	Proposed Land Use Plan - Old Sterling	39
Figure 8	Sterling Small Area Plan	40
Figure 9	Proposed Road Network - Old Sterling	42
Figure 10	Old Sterling Small Area Plan Transportation Matrix	43
Figure 11	Proposed Density, NE Quadrant	48
Figure 12	Proposed Development North Side of Route 7, East of Cedar Drive ..	51

ENVIRONMENTAL PLAN

Figure 1	Physiographic Provinces	59
Figure 2	Drainage Basins	60
Figure 3	Floodplains	68
Figure 4	Stream Hydrograph	70
Figure 5	Steep Slopes	71
Figure 6	Water Problems Associated with Development	74
Figure 7	Noise Impact	82
Figure 8	Dulles International Airport - Noise Exposure Forecast Contours Post 1995	83

COMMUNITY DESIGN

Figure 1	Community Design	91
Figure 2	Architectural Design	92
Figure 3	Trails and Open Space Conceptual Plan	94
Figure 4	Cluster Development Techniques	103
Figure 5	Typical Subdivision	104
Figure 6	Cluster	105
Figure 7	Illustration of Community Design Principles	106
Figure 8	Relationship of Community Design Elements	107
Figure 9	Orientation for Energy Conservation	108
Figure 10	Street & Parking Design	110

COMMERCIAL AND OFFICE DEVELOPMENT PLAN

Figure 1	Existing Commercial Development	117
Figure 2	Existing Commercially Zoned Land	119
Figure 3	Large Regional Center	122
Figure 4	Community Services (New Development)	125
Figure 5	Recommended Development Pattern	128

LIST OF FIGURES

(Concluded)

PAGE

INDUSTRIAL AND ECONOMIC DEVELOPMENT PLAN

Figure 1	Existing Zoning (Generalized)	143
Figure 2	Proposed Areas for Increased F.A.R. (Generalized)	152
Figure 3	Proposed Industrial Zoning (Generalized)	153

TRANSPORTATION PLAN

Figure 1	Current Regional Expressways	168
Figure 2	Primary and Secondary Roads	170
Figure 3	Bikeway Classifications	176
Figure 4	Recommended Highway Improvements	179
Figure 5	Proposed Route 28 Alignment	180
Route 7 Corridor Plan		182
Figure 6A	Proposed Typical Sections - Route 7 Corridor Plan	182
Figure 6B	Proposed ELAMP Road Network	182

COMMUNITY FACILITIES

Figure 1	Sewer Service Area	212
Figure 2	Existing and Proposed Sewer Lines	213
Figure 3	Existing and Proposed Water Lines	214
Figure 4	Existing School Sites - 1979	223
Figure 5	Existing Recreational Facilities	231
Figure 6	Fire and Rescue Facilities	242

HERITAGE RESOURCES

Figure 1	Primary Historic Sites	271
Figure 2	Primary Scenic Resources	276

ENERGY PLAN

Figure 1	Site Considerations for Energy Efficiency	280
Figure 2	Checklist for Energy Efficient Design	281